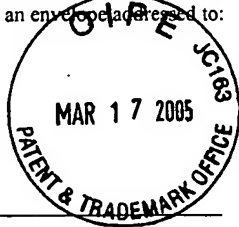


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PATENT  
Attorney Docket No.: 019282-001511US  
Client Reference No.: X-0029.1R1

On March 14, 2005

TOWNSEND and TOWNSEND and CREW LLP

By: 

Tiffany F. Wu

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Zerangue and Paddon

Application No.: 10/763,644

Filed: January 22, 2004

For: HUMAN ORGANIC SOLUTE  
TRANSPORTERS

Examiner: Not yet assigned

Art Unit: Not yet assigned

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the non-U.S. patent references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Joe Liebeschuetz  
Reg. No. 37,505

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
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JOL:scg  
60404514 v1



PTO/SB/21 (09-04)

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

8

Application Number

10/763,644

Filing Date

January 22, 2004

First Named Inventor

Zerangue, Noa

Art Unit

Not yet assigned

Examiner Name

Not yet assigned

Attorney Docket Number

019282-001511US

**ENCLOSURES (Check all that apply)**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form                             | <input type="checkbox"/> Drawing(s)   | <input type="checkbox"/> After Allowance Communication to TC                            |
| <input type="checkbox"/> Fee Attached                                     | <input type="checkbox"/> Licensing-related Papers   | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences     |
| <input type="checkbox"/> Amendment/Reply                                  | <input type="checkbox"/> Petition   | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final                                      | <input type="checkbox"/> Petition to Convert to a Provisional Application                               | <input type="checkbox"/> Proprietary Information  |
| <input type="checkbox"/> Affidavits/declaration(s)                        | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address                 | <input type="checkbox"/> Status Letter  |
| <input type="checkbox"/> Extension of Time Request                        | <input type="checkbox"/> Terminal Disclaimer  | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):         |
| <input type="checkbox"/> Express Abandonment Request                      | <input type="checkbox"/> Request for Refund   | Return Postcard   |
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| <input type="checkbox"/> Certified Copy of Priority Document(s)           | <b>Remarks</b> The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430. |   |
| <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application   |   |   |
| <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 |   |   |

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name

Townsend and Townsend and Crew LLP

Signature

Printed name

Joe Liebeschuetz

Date

March , 2005

Reg. No.

37,505

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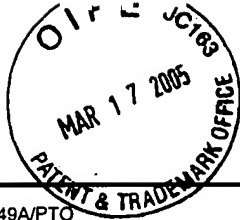
Signature

Typed or printed name

Tiffany F. Wu

Date

March 14, 2005



<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/763,644	
			Filing Date	January 22, 2004	
			First Named Inventor	Zerangue, Noa	
			Art Unit	Not yet assigned	
			Examiner Name	Not yet assigned	
Sheet	1	of	4	Attorney Docket Number	019282-001511US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	US-6,040,138	03-21-2000	Lockhart et al.	
	AB	US-5,578,325	11-26-1996	Domb et al.	
	AC	US-5,543,158	08-06-1996	Gref et al.	
	AD	US-4,704,362	11-03-1987	Itakura et al.	
	AE	US-4,680,338	07-14-1987	Sundoro	
	AF	US-4,671,958	06-09-1987	Rodwell et al.	
	AG	US-4,669,784	06-02-1987	Grasse	
	AH	US-4,659,839	04-21-1987	Nicolotti et al.	
	AI	US-4,589,071	05-13-1986	Yamamuro et al.	
	AJ	US-4,569,789	02-11-1986	Blattler et al.	
	AK	US-4,414,148	11-08-1983	Jansen et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	AL	WO	90/07861	A1	07-26-1990	Queen et al.		<input type="checkbox"/>
	AM	WO	91/17271	A1	11-14-1991	Dower et al.		<input type="checkbox"/>
	AN	WO	92/01047	A1	01-23-1992	McCafferty et al.		<input type="checkbox"/>
	AO	WO	93/06121	A1	04-01-1993	Dower et al.		<input type="checkbox"/>
	AP	WO	94/08051	A1	04-14-1994	Still et al.		<input type="checkbox"/>
	AQ	WO	95/12608	A1	05-11-1995	Sugarman et al.		<input type="checkbox"/>
	AR	WO	95/30642	A1	11-16-1995	Baldwin et al.		<input type="checkbox"/>
	AS	WO	95/32184	A1	11-30-1995	Hogan		<input type="checkbox"/>
	AT	WO	95/35278	A1	12-28-1995	Gallop et al.		
	AU	WO	95/35503	A1	12-28-1995	Baldwin et al.		
	AV	WO	97/27317	A1	07-31-1997	Lockhart et al.		
	AW	WO	01/20331	A1	03-22-2001	Dower, et al.		
	AX	WO	03/065982	A2	08-14-2003	Zerangue et al		
	AY	EP	0 188 256	B1	08-21-1991	Fritzberg		
	AZ	EP	0 853 679	B1	01-22-2003	Lockhart et al.		

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/763,644	
			Filing Date	January 22, 2004	
			First Named Inventor	Zerangue, Noa	
			Art Unit	Not yet assigned	
			Examiner Name	Not yet assigned	
Sheet	2	of	4	Attorney Docket Number	019282-001511US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BA	Altschul <i>et al.</i> ; Basic Local Alignment Search Tool; <i>J. Mol. Biol.</i> 215:403-410 (1990)	
	BB	Aramaki, Y., <i>et al.</i> ; Stability of Liposomes <i>in Vitro</i> and Their Uptake by Rat Peyer's Patches Following Oral Administration; <i>Pharm. Res.</i> 10:1228-1231 (1993)	
	BC	Aruffo & Seed; Molecular Cloning of a CD28 cDNA by a High-Efficiency COS Cell Expression System; <i>Proc. Natl. Acad. Sci. USA</i> 84:8573-8577 (1977)	
	BD	Ballatori; Bile Salt Excretion in Skate Liver is Mediated by a Functional Analog of Bsep/Spgp, the Bile Salt Export Pump; <i>Am. J. Physiol.</i> 278	
	BE	Borst <i>et al.</i> ; A Family of Drug Transporters: the Multidrug Resistance-Associated Proteins; <i>J. Natl. Cancer Inst.</i> 92, 1295-1302	
	BF	Boyer, J.L. <i>et al.</i> ; Phylogenetic and Ontogenic Expression of Hepatocellular Bile Acid Transport; <i>Proc. Natl. Acad. Sci. USA</i> 90, 435-438 (1993)	
	BG	Boyer, J.L. <i>et al.</i> ; Biliary Secretion in Elasmobranchs. II. hepatic Uptake and Biliary Excretion of Organic Anions; <i>Am. J. Physiol.</i> 230, 974-978 (1976)	
	BH	Bunin, B.A. <i>et al.</i> ; A General and Expedient Method for the Solid-Phase Synthesis of 1,4-Benzodiazepine Derivatives; <i>J Amer Chem Soc</i> , 114:10997, 1992	
	BI	Chen <i>et al.</i> ; Polymerized Liposomes as Potential Oral Vaccine Carriers: Stability and Bioavailability; <i>J. Contr. Rel.</i> 42:263-272 (1996)	
	BJ	de la Luna, S. <i>et al.</i> ; Efficient Transformation of Mammalian Cells with Constructs Containing a Puromycin-Resistance Marker; (1998) <i>Gene</i> 62:121	
	BK	Deshmukh, D.S., <i>et al.</i> ; Can Intact Liposomes be Absorbed in the Gut?; <i>Life Sci.</i> 28:239-242 (1981)	
	BL	Dolle & Nelson; Comprehensive Survey of Combinatorial Library Synthesis: 1998; <i>J. Combinatorial Chemistry</i> 1. 235-282 (1999)	
	BM	Eggenweiler, H.M.; Linkers for Solid-Phase Synthesis of Small Molecules: Coupling and Cleavage Techniques; <i>Drug Discovery Today</i> , 3: 552 (1998)	
	BN	Fricker, G. <i>et al.</i> ; Characteristics of Bile Salt Uptake into Skate Hepatocytes; <i>Biochem. J.</i> 299, 665-670 (1994)	
	BO	Henikoff & Henikoff; Amino Acid Substitution Matrices from Protein Blocks; <i>Proc. Natl. Acad. Sci. USA</i> 89:10915 (1989)	
	BP	Hershko & Ciechanover; Mechanisms of Intracellular Protein Breakdown; <i>Ann. Rev. Biochem.</i> 51:335-364 (1982)	

Examiner Signature	Date Considered
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



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Sheet	3	of	4	Attorney Docket Number	019282-001511US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BQ	Kanehisa, M.; Use of Statistical Criteria for Screening Potential Homologies in Nucleic Acid Sequences; <i>Nucleic Acids Res.</i> 12:203-213 (1984)	
	BR	Karlin & Altschul; Applications and Statistics for Multiple High-Scoring Segments in Molecular Sequences; <i>Proc. Nat'l. Acad. Sci. USA</i> 90:5873-5787 (1993)	
	BS	Keppler, D. <i>et al.</i> ; Hepatic Secretion of Conjugated Drugs and Endogenous Substances; <i>Semin. Liver Dis.</i> 20, 265-272 (2000)	
	BT	Kohler, <i>et al.</i> ; Continuous Cultures of Fused Cells Secreting Antibody of Predefined Specificity; <i>Nature</i> , 256:495, (1975)	
	BU	Kullack-Ublick <i>et al.</i> ; Hepatic Transport of Bile Salts; <i>Semin. Liver Dis.</i> 20, 273-292 (2000)	
	BV	Langer, R.; New Methods of Drug Delivery; <i>Science</i> 249:1527-1533 (1990)	
	BW	Lee, <i>et al.</i> ; Glucocorticoids Regulate Expression of Dihydrofolate Reductase cDNA in Mouse Mammary Tumour Virus Chimaeric Plasmids; <i>Nature</i> 294:228 (1981)	
	BX	Miller, <i>et al.</i> ; Improved Retroviral Vectors for Gene Transfer and Expression; <i>BioTechniques</i> 7:980	
	BY	Needels, <i>et al.</i> ; Generation and Screening of an Oligonucleotide-Encoded Synthetic Peptide Library; <i>Proc. Natl. Acad. Sci. USA</i> 1993, 90, 10700-04	
	BZ	Needleman & Wunsch,; A General Method Applicable to the Search for Similarities in the Amino Acid Sequence of Two Proteins; <i>J. Mol. Biol.</i> 48:443 (1970)	
	CA	Nielsen <i>et al.</i> ; Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide; <i>Science</i> 254, 1497-1500 (1991)	
	CB	Ni, <i>et al.</i> ; Versatile Approach to Encoding Combinatorial Organic Syntheses Using Chemically Robust Secondary Amine Tags; <i>J. Med. Chem.</i> 1996, 39, 1601	
	CC	Pearson & Lipman; Improved Tools for Biological Sequence Comparison; <i>Proc. Nat'l. Acad. Sci. USA</i> 85:2444 (1988)	
	CD	Queen <i>et al.</i> ; A Humanized Antibody that Binds to the Interleukin 2 Receptor; <i>Proc. Natl. Acad. Sci. USA</i> 86:10029-10033 (1989)	
	CE	Saier, M.H.; A Functional-Phylogenetic Classification System for Transmembrane Solute Transporters; <i>Microbiol. Mol. Biol. Rev.</i> 64 354-411 (2000)	

Examiner Signature		Date Considered	
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Sheet	4	of	4	Attorney Docket Number	019282-001511US

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	CF	Seward, D.J. et al.; "Functional Complementation Between a Novel Mammalian Polygenic Transport Complex and an Evolutionarily Ancient Organic Solute Transporter, <i>OST<math>\alpha</math>/OST<math>\beta</math></i> "; <i>J. Biol. Chem.</i> 278(30):27473-27482 (July 25, 2003)	
	CG	Smith & Waterman; Comparison of Biosequences; <i>Adv. Appl. Math.</i> 2:482 (1981)	
	CH	Smith, D.J. et al.; Taurocholate Uptake by Isolated Skate Hepatocytes: Effect of Albumin; <i>Am. J. Physiol.</i> 252, G479-G484 (1993)	
	CI	Sonnhammer, et al.. A Hidden Markov Model for Predicting Transmembrane Helices in Protein Sequences, <i>Proceedings of the Sixth International Conference on Intelligent Systems for Molecular Biology</i> , pages 175-182, Menlo Park, CA, 1998. AAAI Press.	
	CJ	Suzuki, H. et al.; Transport of Drugs Across the Hepatic Sinusoidal Membrane: Sinusoidal Drug Influx and Efflux in the Liver; <i>Semin. Liver Dis.</i> 20, 251-263 (2000)	
	CK	Wang, W. et al.; "Expression Cloning of Two Genes that Together Mediate Organic Solute and Steroid Transport in the Liver of a Marine Vertebrate"; <i>PNAS</i> 98(16):9431-9436 (July 31, 2000)	
	CL	Yates, J.L. et al.; Stable Replication of Plasmids Derived from Epstein-Barr Virus in Various Mammalian Cells; <i>Nature</i> 313:812(1985)	

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